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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,407	02/18/2004	Terry D. Long	P00784-US-01	3056
31835	7590	08/10/2005	EXAMINER	
RUSSELL E. FOWLER, II ICE MILLER ONE AMERICAN SQUARE, BOX 82001 INDIANAPOLIS, IN 46282-0002			COOLEY, CHARLES E	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,407	Applicant(s) LONG, TERRY D.	
	Examiner Charles E. Cooley	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-26 and 28-36 is/are rejected.
- 7) ☒ Claim(s) 14, 27 and 34 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>02182004</u> . | 6) <input type="checkbox"/> Other: ____. |

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NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

2. As the PTO continues to move towards a fully electronic environment, the office will phase-in its E-Patent Reference program. This program: (1) provides downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's PAIR system; and (2) ceases mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under PCT.

Effective June 2004, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions from this Technology Center. Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

The U.S. patents and patent application publications cited in office actions are available for download via the Office's PAIR system. As an alternate source, all U.S.

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patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources.

Inquiries about the use of the Office's PAIR system should be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Priority

3. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. § 119(e).

Information Disclosure Statement

4. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 18 FEB 2004.

Drawings

5. The drawings are objected to under 37 CFR § 1.84 for the reasons set forth on the attached PTO-948 form.
6. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

7. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
8. The abstract is acceptable.
9. The title is acceptable.

Claim Rejections - 35 U.S.C § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1, 4-6, 11-13, 17-20, 25-26, 29 and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by SCHOB (US 6,733,171 B2).**

SCHOB (US 6,733,171 B2) discloses the recited apparatus and magnetic stirring method (Figures 19-20) including a reactor 3; rotatable (denoted at 2e) wheel 2g with opposed drive magnets 2d encompassing the reactor 3; a mixer 1 with magnets 1m within the reactor 3 driven by the rotating wheel 2g; the wheel 2g being adjustable

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along the axis of the reactor (denoted at 2h); axially movable lift 2b (denoted at 2h) attached to the wheel 2g.

12. Claims 1, 4-9, 15-23, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by (JP 2-194826).

(JP 2-194826) discloses the recited apparatus and magnetic stirring method (Figures 1-2) including a reactor 1; rotatable wheel 12 with opposed drive magnets 10' encompassing the reactor 1; a mixer 9, 19 with magnets 10 within the reactor 1 driven by the rotating wheel 12; the wheel 12 being driven by a belt 16 which is driven by a pulley 15; the pulley 15 being driven by motor 14; and holder 13 and/or 13'.

13. Claims 1, 4-9, and 17-23 are rejected under 35 U.S.C. 102(b) as being anticipated by (JP 1-207122).

(JP 1-207122) discloses the recited apparatus and magnetic stirring method (Figures 1-6) including a reactor 1; rotatable wheel 9 or 59 or 69A with opposed drive magnets 8A, 8B or 48A, 48B or 58A, 58B encompassing the reactor 1; a mixer 33A, 33B or 43, 53 with magnets 7A, 7B or 47A, 47B or 57A, 57B within the reactor 1 driven by the rotating wheel 9 or 59 or 69A; the wheel 9 or 59 or 69A being driven by a belt 27 which is driven by a pulley 25; the pulley 25 being driven by motor 29.

Claim Rejections - 35 U.S.C § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 2, 3, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOB (US 6,733,171 B2).

SCHOB (US 6,733,171 B2) discloses the recited apparatus and magnetic stirring method (Figures 19-20) including a reactor 3; rotatable (denoted at 2e) wheel 2g with opposed drive magnets 2d encompassing the reactor 3; a mixer 1 with magnets 1m within the reactor 3 driven by the rotating wheel 2g; the wheel 2g being adjustable along the axis of the reactor (denoted at 2h); axially movable lift 2b (denoted at 2h) attached to the wheel 2g. SCHOB does not disclose the plurality of reactors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have duplicated the elements shown in Figs. 19-20 of SCHOB such that a plurality of reactors and corresponding wheels are provided, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

16. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over (JP 2-194826).

JP 2-194826 discloses the recited apparatus and magnetic stirring method (Figures 1-2) including a reactor 1; rotatable wheel 12 with opposed drive magnets 10' encompassing the reactor 1; a mixer 9, 19 with magnets 10 within the reactor 1 driven by the rotating wheel 12; the wheel 12 being driven by a belt 16 which is driven by a pulley 15; the pulley 15 being driven by motor 14; and holder 13 and/or 13'. JP 2-194826 does not disclose the plurality of reactors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have duplicated the elements shown in Figs. 1-2 of JP 2-194826 such that a plurality of reactors and corresponding wheels are provided, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

17. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over (JP 1-207122).

JP 1-207122 discloses the recited apparatus and magnetic stirring method (Figures 1-6) including a reactor 1; rotatable wheel 9 or 59 or 69A with opposed drive magnets 8A, 8B or 48A, 48B or 58A, 58B encompassing the reactor 1; a mixer 33A, 33B or 43, 53 with magnets 7A, 7B or 47A, 47B or 57A, 57B within the reactor 1 driven by the rotating wheel 9 or 59 or 69A; the wheel 9 or 59 or 69A being driven by a belt 27 which is driven by a pulley 25; the pulley 25 being driven by motor 29. JP 1-207122 does not disclose the plurality of reactors. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have duplicated the

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elements shown in Figs. 1-6 of JP 1-207122 such that a plurality of reactors and corresponding wheels are provided, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

18. Claims 7-10, 21-24, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOB (US 6,733,171 B2) in view of MULLER (US 4,697,929).

SCHOB (US 6,733,171 B2) discloses the recited apparatus and magnetic stirring method (Figures 19-20) including a reactor 3; rotatable (denoted at 2e) wheel 2g with opposed drive magnets 2d encompassing the reactor 3; a mixer 1 with magnets 1m within the reactor 3 driven by the rotating wheel 2g; the wheel 2g being adjustable along the axis of the reactor (denoted at 2h); axially movable lift 2b (denoted at 2h) attached to the wheel 2g. SCHOB (US 6,733,171 B2) does not disclose the mechanism for imparting rotating motion to the wheel 2g, namely in the form of a motor driven pulley and belt or motor driven gear. MULLER discloses mechanisms 98 and 100 for driving wheels 52 and 72, respectively. The wheel 52 is driven by a worm gear 107 that is driven by a shaft and motor 11. The wheel 72 is driven by a belt 105 driven by a pulley 103 that is driven by a motor 11A. Since MULLER teaches that driven members such as wheels 52 and 72 can be driven by alternative driving mechanisms which either utilize a motor driven worm gear or a motor driven belt and pulley arrangement, it would have been obvious to one skilled in the art to have provided the wheel of SCHOB (US

6,733,171 B2) with a motor driven pulley and belt or motor driven gear for the purpose of driving the wheel into rotary motion.

19. Claims 10, 24, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOB (US 6,733,171 B2) in view of ALLEGRI, SR. (US 4,372,394).

SCHOB (US 6,733,171 B2) discloses the recited apparatus and magnetic stirring method (Figures 19-20) including a reactor 3; rotatable (denoted at 2e) wheel 2g with opposed drive magnets 2d encompassing the reactor 3; a mixer 1 with magnets 1m within the reactor 3 driven by the rotating wheel 2g; the wheel 2g being adjustable along the axis of the reactor (denoted at 2h); axially movable lift 2b (denoted at 2h) attached to the wheel 2g. SCHOB (US 6,733,171 B2) does not disclose the mechanism for imparting rotating motion to the wheel 2g, namely in the form of a motor driven gear.

ALLEGRI, SR. discloses a mechanism 26 for driving a wheel 32 having driving magnets 29 thereon that magnetically couples and therefore drives a mixer/agitator 21 in the vessel 20. The wheel 32 is driven by a worm gear 34 that is driven by a shaft 31 and motor (col. 2, lines 30-34). Since ALLEGRI, SR. teaches that a driven member such as a wheel 32 having drive magnets 29 thereon can be driven by a driving mechanism that utilizes a motor driven worm gear, it would have been obvious to one skilled in the art to have provided the wheel of SCHOB (US 6,733,171 B2) with a motor driven gear for the purpose of driving the wheel into rotary motion.

20. Claims 7-9, 21-23, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOB (US 6,733,171 B2) in view of JP 2-194826 or JP 1-207122.

SCHOB (US 6,733,171 B2) discloses the recited apparatus and magnetic stirring method (Figures 19-20) including a reactor 3; rotatable (denoted at 2e) wheel 2g with opposed drive magnets 2d encompassing the reactor 3; a mixer 1 with magnets 1m within the reactor 3 driven by the rotating wheel 2g; the wheel 2g being adjustable along the axis of the reactor (denoted at 2h); axially movable lift 2b (denoted at 2h) attached to the wheel 2g. SCHOB (US 6,733,171 B2) does not disclose the mechanism for imparting rotating motion to the wheel 2g, namely in the form of a motor driven pulley and belt.

JP 2-194826 discloses the recited apparatus and magnetic stirring method (Figures 1-2) including a reactor 1; rotatable wheel 12 with opposed drive magnets 10' encompassing the reactor 1; a mixer 9, 19 with magnets 10 within the reactor 1 driven by the rotating wheel 12; the wheel 12 being driven by a belt 16 which is driven by a pulley 15; the pulley 15 being driven by motor 14; and holder 13 and/or 13'.

JP 1-207122 discloses the recited apparatus and magnetic stirring method (Figures 1-6) including a reactor 1; rotatable wheel 9 or 59 or 69A with opposed drive magnets 8A, 8B or 48A, 48B or 58A, 58B encompassing the reactor 1; a mixer 33A, 33B or 43, 53 with magnets 7A, 7B or 47A, 47B or 57A, 57B within the reactor 1 driven by the rotating wheel 9 or 59 or 69A; the wheel 9 or 59 or 69A being driven by a belt 27 which is driven by a pulley 25; the pulley 25 being driven by motor 29. Since JP 2-

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194826) and JP 1-207122 both teach that a driven member such as a wheel having drive magnets thereon can be driven by a driving mechanism that utilizes a motor driven belt and pulley arrangement, it would have been obvious to one skilled in the art to have provided the wheel of SCHOB (US 6,733,171 B2) with a motor driven pulley and belt for the purpose of driving the wheel into rotary motion.

Allowable Subject Matter

21. Claims 14, 27, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

22. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or fairly suggest the lift being driven by a lift handle and gear mechanism or the wheels being supported by a mixer case.

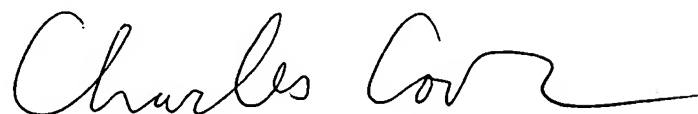
Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

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25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles Cooley", with a long horizontal flourish extending to the right.

Charles E. Cooley
Primary Examiner
Art Unit 1723

5 August 2005